

SAFT AMERICA INC, POWER SOURCES DIV -- NICKEL CADMIUM AIRCRAFT BATTERY --
6140-01-040-4408

===== Product Identification =====

Product ID:NICKEL CADMIUM AIRCRAFT BATTERY

MSDS Date:10/03/1994

FSC:6140

NIIN:01-040-4408

MSDS Number: BXYXB

=== Responsible Party ===

Company Name:SAFT AMERICA INC, POWER SOURCES DIV

Address:711 INDUSTRIAL BLVD

Box:1886

City:VALDOSTA

State:GA

ZIP:31603

Country:US

Info Pho

ne Num:912-247-2331/FAX 912-245-2880

Emergency Phone Num:912-247-2331

Chemtre Ind/Phone:(800)424-9300

CAGE:09052

=== Contractor Identification ===

Company Name:SAFT AMERICA INC.

Address:711 INDUSTRIAL BLVD

Box:1886

City:VALDOSTA

State:GA

ZIP:31602

Country:US

Phone:912-247-2331

CAGE:09052

===== Composition/Information on Ingredients =====

Ingred Name:NICKEL OXIDE

CAS:1313-99-1

RTECS #:QR8400000

= Wt:18.

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3 AS NI

ACGIH TLV:1 MG/M

3 AS NI

Ingred Name:POTASSIUM HYDROXIDE (SARA III) (ELECTROLYTE SOLUTION)

CAS:1310-58-3

RTECS #:TT2100000

= Wt:19.

Other REC Limits:NONE RECOMMENDED

OSHA PEL:C 2 MG/M3

ACGIH TLV:C 2 MG/M3; 9394

EPA Rpt Qty:1000 LBS

DOT Rpt Qty:1000 LBS

Ingred Name:CADMIUM OXIDE (SARA III), SOLID

CAS:1306-19-0

RTECS #:EV1925000

= Wt:13.

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0.2 MG (CD)/M3 DUST

ACGIH TLV:0.01 MG(CD)/M3; 9394

Ingred Name:COPPER (SARA III)

CAS:7440-50-8

RTECS #:GL5325000

= Wt:9.

Other REC Li

mits:NONE RECOMMENDED

OSHA PEL:0.1MG/M3 FUME/1 DUST

ACGIH TLV:0.2 MG/M3 FUME; 9394

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:NYLON 11

CAS:25587-80-8

= Wt:15.

Other REC Limits:NONE RECOMMENDED

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===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:YES

Health Hazards Acute and Chronic:(ELECTROLYTE): EYE-VERY RAPID, SEVERE
DAMAGE. EXTREMELY CORROSIVE TO EYE.

SKIN-SERIOUS BURNS TO SKIN

TISSUE. INGESTION-TISSUE DAMAGE TO THROAT AREA AND GASTRO/RESPIRATORY TRACT. INHALATION-VARYING DEGREES OF IRRITATION OF THE NASAL MUCOUS MEMBRANES & RESPIRATORY TRACT TISSUES.

Explanation of Carcinogenicity:NIOSH RECOMMENDED THAT NICKEL & CADMIUM BE TREATED AS OCCUPATIONAL CARCINOGENS.

Effects of Overexposure:(ELECTROLYTE): EYE-PERMANENT BLINDNESS.

(CADMIUM OXIDE): INHALATION-DRY THROAT, COUGH, HEADACHE, VOMITING, CHEST PAIN, CHILLS. (NICKEL

COMPOUNDS): INGESTION-NAUSEA AND INTESTINAL DISORDERS.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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===== First Aid Measures =====

First Aid:ELECTROLYTE: EYE-FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MIN. GET IMMEDIATE MEDICAL ATTENTION. SKIN-REMOVE SOLID CLOTHING & FLUSH AFFECTED AREA WITH PLENTY OF WATER FOR AT LEAST 15 MIN. INGESTION- DO NOT INDUCE VOMITING. DILUTE BY GIVING WATER/MILK. GET IMMEDIATE MEDICAL ATTENTION. INHALATION-REMOVE TO FRESH AIR. GIVE OXYGEN OR ARTIFICIAL RESPIRATION IF NEEDED. GET IMMEDIATE MEDICAL ATTENTION.

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===== Fire Fighting Measures =====

Extinguishing Media:CARBON DIOXIDE, SAND.

Fire Fighting Procedures:USE SELF-CONTAINED BREATHING APPARATUS TO AVOID BREATHING TOXIC FUMES. WEAR PROTECTIVE CLOTHING & EQUIPMENT TO PREVENT POTENTIAL BODY CONTACT WITH ELECTROLYTE.

Unusual Fire/Explosion Hazard:ELECTROLYTE SOLUTION IS CORROSIVE TO

HUMAN TISSUE, IT WILL REACT VIOLENTLY WITH MANY ORGANIC CHEMICALS, ESPECIALLY NITROCARBONS AND CHLOROCARBONS.

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===== Accidental Release Measures =====

Spill Release Procedures:ELECTROLYTE:FLUSH WITH WATER & NEUTRALIZE WITH DILUTE CITRIC ACID. LARGE-CONTAIN MATERIAL IN SUITABLE CONTAINER OR HOLDING AREA. DO NOT ALLOW MATERIAL TO ENTER SEWER, STREAMS OR STORM CONDUITS. RECOVER MATERIAL WITH VACUUM TRUCK & DISPOSE OF PROPERLY

Neutralizing

Agent:DILUTE CITRIC ACID.

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===== Handling and Storage =====

Handling and Storage Precautions:CARE SHOULD BE TAKEN TO HANDLE CELLS PROPERLY TO AVOID SHOERTING OR MISUSE THAT WILL RESULT IN RAPID UNCONTROLLED ELECTRICAL, CHEMICAL OE HEAT ENERGY.
Other Precautions:DO NOY TRANSPORT BATTERIES WITHOUT VENT CAP IN PLACE. WHEN REMOVING BATTERY FROM SERVICE VISUALLY INSPECT FOR LEAKAGE PRIOR TO HANDLING. DO NOT ALLOW AN EXPOSED FLAME OR SPARK TO COME NEAR THE CELLS.

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===== Exposure Controls/Personal Protection =====

Respiratory Protection:USE NIOSH/MSHA APPROVED RESPIRATOR DURING LEVEL CHARGING TO MAINTAIN EXPOSURE LEVELS BELOW THE TWA.
Ventilation:WELL VENTILATED AREA WHEN PERFORMING LEVEL CHARGING PROCEDURES TO REMOVE NORMAL GASES GENERATED.
Protective Gloves:SYNTHETIC RUBBER.
Eye Protection:SPLASH GOGG OR FACE SHIELD.
Other Protective Equipment:URBBER BOOTS, RUBBER APRON OR RAINWEAR OR EQUIVALENT IF EXPO T
O ELECTROLYTE SOLN IS POSSIBLE. DO NOT USE LEATHER OR WOOL
Work Hygienic Practices:WASH HANDS AFTER HANDLING. LAUNDER CONTAMIN CLOTHING BEFORE REUSE. DISCARD CONTAMIN LEATHER GOODS.
Supplemental Safety and Health
NOTE THAT NORMAL REACTIONS INSIDE BATTERY LIBERATES FLAMMABLE HYDROGEN GAS. UNIT OF ISSUE IS PACKAGE (PG) CONTAINING 19 CELLS.

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===== Physical/Chemical Properties =====

HCC:Z5
Spec Gravity:1.25-1.30(ACID)
Solubility in Water:ELECTROLYTE SOLUBLE.
Appearance and Odor:NONE SPECIFIED BY MANUFACTURER.

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===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES
ALUMINUM, ZINC, TIN & OTHER ACTIVE METALS, ACID, CHLORINATED & AROMATIC HYDROCARBONS, NITROCARBONS, HALOCARBONS.
Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.
Hazardous Decomposition Products:NICKEL OXIDE, CADMIUM, CADMIUM OXIDE, POTASSIUM HYDROXIDE.

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===== Disposal Considerations =====

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Waste Disposal Methods: STORAGE BATTERY IS A HAZARDOUS WASTE UNDER RCRA. IT MAY BE RETURNED TO SAFT FOR RECYCLING. BATTERY IS TCLP TOXIC. BATTERY & ELECTROLYTE SOLN ARE CORROSIVE. IF NOT RECYCLED MUST BE DISPOSED OF IN ACCORDANCE W/ALL LOCAL, STATE AND FEDERAL REGULATIONS.

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